IN THE CLAIMS:

Please amend the claims as follows:

1. (Previously Presented) A method of instructing a computer program to self-optimize, said method comprising:

inputting a selection command that selects one function from a list of pre-selected functions for input into said computer program at a point of choice determined by a programmer, wherein each function from said list of pre-selected functions is associated with a reward; and

allowing a learning protocol comprised of learning instructions in said computer program to track and reward said one function that is selected and to determine an approximate optimal choice of operation of said computer program based on said selection command.

2-4. (Canceled).

5. (Previously Presented) The method of claim 1, further comprising inputting a rule command that establishes a rule for said computer program on how to determine said approximate optimal choice of operation.

6. (Previously Presented) The method of claim 1, further comprising inputting a reward command that provides a reward, at a point of choice, determined by a programmer, in said computer program, for said one function selected by said selection command, which results in said approximate optimal choice for self-optimizing said computer program.

7. (Previously Presented) A method of optimizing a computer program, said method comprising:

specifying at least one point of choice, determined by a programmer, in said computer program;

defining a set of alternate choices at each point of choice, wherein said set of alternate choices include operational choices comprising:

inputting a selection command that selects one function from a list of pre-selected functions for input into said computer program, wherein each function from said list of pre-selected functions is associated with a reward;

allowing a learning protocol comprised of learning instructions in said computer program to track and reward said one function that is selected to determine an approximate optimal operation of said computer program based on said selection command; and

setting at least one feedback point for said each point of choice.

8. (Previously Presented) The method of claim 7, further comprising allowing a learning protocol in said computer program to determine an approximate optimal operation of said computer program based on said specifying, defining, and setting.

9-10. (Canceled).

11. (Previously Presented) The method of claim 8, wherein said set of alternate choices include operational choices, further comprising:

inputting a rule command into said computer program, wherein said rule command establishes a rule on how to determine said approximate optimal operation.

12. (Previously Presented) The method of claim 8, wherein said set of alternate choices include operational choices, and wherein said method further comprises:

inputting a reward command into said computer program at a point of choice, determined by a programmer, wherein said reward command provides reward in said computer program, which results in said approximate optimal choice for optimizing said computer program.

13. (Previously Presented) A program storage device readable by computer, tangibly embodying a program of instructions executable by said computer to perform a method of instructing a computer program to self-optimize, said method comprising:

inputting a selection command that selects one function from a list of pre-selected functions for input into said computer program at a point of choice, determined by a programmer, wherein each function from said list of pre-selected functions is associated with a reward; and

allowing a learning protocol comprised of programmer determined learning instructions in said computer program to track and reward said one function that is selected and to determine an approximate optimal choice of operation of said computer program based on at least said selection command.

14-16. (Canceled).

17. (Previously Presented) The program storage device of claim 13, further comprising inputting a rule command that establishes a rule for said computer program on how to determine said approximate optimal choice of operation.

18. (Previously Presented) The program storage device of claim 13, further comprising inputting a reward command that provides a reward, at a point of choice, determined by a programmer, in said computer program, for said one function selected by said selection command, which results in said approximate optimal choice for optimizing said computer program.

19. (Previously Presented) A computer system comprising:

a pre-compiler that inputs a selection command at a point of choice, determined by a programmer, into a computer program that runs on a computer, said selection command selecting one function from a list of pre-selected functions for input into said computer program, wherein each function from said list of pre-selected functions is associated with a reward; and

a processor adapted to execute a learning protocol in said computer program to track and reward said one function that is selected and determine an approximate optimal operation of said computer program based on at least said selection command.

20-22. (Canceled).

23. (Previously Presented) The system of claim 19, wherein said pre-compiler further inputs a rule command into said computer program that runs on said computer, said rule command establishing a rule for said computer program on how to determine said approximate optimal choice of operation.

24. (Previously Presented) The system of claim 19, wherein said pre-compiler further inputs a reward command that provides a reward, at a point of choice in said computer program which runs on said computer, for said one function selected by said selection command, which results in said approximate optimal choice for optimizing said computer program.

25. (Canceled).